998-145 Prophylactic Low Dose Amiodarone versus Placebo to Prevent Atrial Fibrillation in Patients Undergoing Coronary Artery Bypass Graft Surgery

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Post operative atrial fibrillation (AF) occurs in 20–40% of patients undergoing coronary artery bypass graft surgery (CABG). Post operative A-fib contributes to delayed recovery, increased length of stay, and increased hospital cost. We report a randomized double blind trial comparing oral amiodarone (AMIO) to placebo for the prevention A-fib after CABG. All patients undergoing CABG were considered eligible. Exclusion criteria included: sick sinus syndrome, bradycardia (< 50 BPM), A-fib within the last 6 months, and concurrent therapy with Vaughan Williams Class I or III anti-arrhythmic drug. Patients were given AMIO 2 gm (63 pts) or placebo (64) pts in divided doses 1–3 days prior and 400 mg/day after CABG for 7 days. AF occurred in 25.5% (16/63) of patients receiving AMIO and 31.2% (20/64) of patients receiving placebo OR 0.75, 95% confidence interval 0.34–1.64, p 0.46. Heart rate at onset of AF was 122.9 ± 49.4 BPM in patients on AMIO and 147.2 ± 47.8 BPM in those on placebo (p 0.06). Duration of AF was 9.7 hours ± 8.6 in those on AMIO and 15.9 ± 28.7 hrs on placebo (p 0.67). Post operative length of stay was 5.4 ± 3.8 in those without AF and 9.7 ± 11.2 for those without AF (p 0.004). *Conclusions:* Post CABG AF significantly prolonged hospital stay. Prophylactic amiodarone did not significantly reduce the incidence, heart rate at onset, or duration of post CABG atrial fibrillation in the doses employed.

998-146 Influence of Left Ventricular Function in Aortic Stenosis on Risk of Valve Replacement and Long Term Survival

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Severely compromised left ventricular function is associated with increased risk in cardiac surgery. We compared two groups of patients with heart catheterization between 1987 and 1992 and with severe symptomatic aortic stenosis. Group 1 (n = 50) showed an EF ≤ 40%; group 2 (n = 50) was randomly selected from the same time period and had an EF ≥ 60%. Mean follow up was 4 years. Peak to peak pressure gradient was 71 ± 21.4 mmHg in group 1 and 91.7 ± 31.5 mmHg in group 2. One patient in group 2 denied surgery, one patient in group 1 with Hodgkin's disease preoperatively died of sepsis.

	EF ≤ 40%	EF ≥60%	
Cardiac mortality on waiting list for heart surgery	6 of 50 (12%)	1 of 49 (2%)	p = 0.1
	5.6%/month	0.37%/month	p = 0.003
Mean waiting time	62 days	160 days	p < 0.001
Operative mortality	8 of 43 (18%)	1 of 48 (2%)	p = 0.01

Operative mortality in group 1 patients without significant coronary artery disease (CAD) was 1 of 25 (4%); with significant CAD 7 of 18 (39%); p = 0.006. During follow up patient mortality/year was 0.023 in group 1 and 0.02 in group 2. All surviving patients in group 1 and 86% of patients in group 2 felt better than preoperatively. Mean NYHA class improved from 3.1 to 1.7 in group 1 and 2.8 to 1.8 in group 2.

Conclusion: Significant aortic stenosis with low EF is an emergency indication for aortic valve replacement. Waiting times should be as short as possible. Operative mortality in patients with low EF, severe aortic stenosis and significant coronary artery disease is extraordinarily high. During the first years of follow up quality of life and life expectancy are comparable in patients with normal and low EF.

998-147 Factors Associated With Postoperative Length of Stay After Coronary Artery Bypass Graft Surgery 1981 Through 1995

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Postoperative length of stay (PLOS) following coronary artery bypass graft surgery (CABG) has decreased significantly in recent years. In an analysis of 23,512 patients who had CABG from 1981 through 1995, mean PLOS declined from 8.2 (s.d. 6.0) days in 1981 (median 7) to 6.74 (sd 6.7) days in 1995 (median 5) (p < 0.001). Categorizing patients by time periods, Group 1 1981 through 1987, Group 2 1988 through 1992, and Group 3 1993 through 1995, illustrated the change in PLOS. Group 2 showed an increase in PLOS; significant decrease in PLOS did not occur until 1993–1995. In multivariate analysis using the natural log of PLOS, 26% of the variability in PLOS was accounted for by year of CABG, age, sex, ejection fraction, CHF, diabetes, emergent status, mortality, and these postoperative complications: MI, sternal wound infection, pneumonia, neurological events, ARDS, use of IABP, and angina. With some variation in specific variables, the same factors accounted for 16% of the variability in PLOS for Group 1, 27% for Group 2, and 38% for Group 3.

	Group 1 n = 12088	Group 2 n = 7298	Group 3 n = 4126	p value
PLOS (sd)	8.9 (8.1)	9.7 (26.4)	7.3 (7.4)	< 0.001
PLOS ≤ 3 d.	1.2%	1.96%	5.7%	< 0.001
PLOS ≤ 4 d.	1.4%	2.5%	30.0%	< 0.001

998-148 Acute Ischemia After Coronary Artery Bypass Graft Surgery: The Role of Immediate Catheterization and Angioplasty

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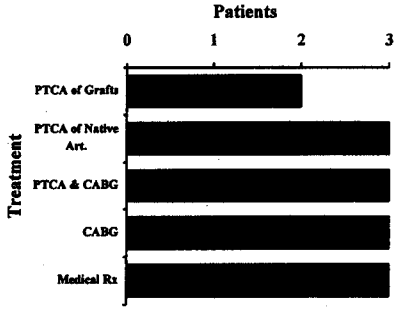
Myocardial ischemia, occurring in the early post operative period following coronary artery bypass graft surgery, (CABG) is often treated by reoperation, or medical therapy. The purpose of this study was to determine the role of cardiac catheterization and percutaneous transluminal coronary angioplasty (PTCA) for myocardial ischemia in the immediate post CABG period. 14 consecutive patients (mean age 64 years, 65% male) undergoing cardiac catheterization after CABG surgery during the same hospitalization were included. Clinical data, cardiovascular profile, surgical, diagnostic catheterization, and interventional procedural data were collected and analyzed. The patients underwent cardiac catheterization a mean of 3 days following CABG, with 6/14 occurring within the first 24 hours. Indications for cardiac catheterization included; ischemic EKG changes – 100%, symptomatic angina – 64%, focal wall motion abnormalities on echocardiography – 78%, and hemodynamic instability-21%. Findings at cardiac catheterization included 1 or more new graft obstruction - 78%, native vessel obstruction 7%, and no identifiable culprit (presumed spasm) – 14%. 5 patients underwent successful PTCA. 2 of these were of obstructed grafts, and 3 were of the native vessels supplied by obstructed grafts. 3 patients underwent an initial PTCA and then repeat CABG, for a more complete revascularization.



Three patients were referred for repeat CABG, and 3 were treated medically. *Conclusion:* 1) Cardiac catheterization and PTCA can be successfully performed immediately following CABG, in patients with post operative myocardial ischemia. A culprit vessel was identified in 85% of the patients. PTCA was successful in achieving revascularization in 35%, and as a bridge to CABG in 21% of patients. Immediate cardiac catheterization and angioplasty should be considered in patients developing acute myocardial ischemia after CABG, as an alternative to reoperation.

998-166 Long-Term Survival after Biological versus Mechanical Aortic Valve Replacement in 1156 Patients

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The effect of biological versus mechanical prostheses on long-term survival remains controversial. Therefore, outcomes were compared in 1156 patients undergoing aortic valve replacement (AVR) with Carpentier-Edwards standard (CE, N = 531) or St. Jude Medical (SJ, N = 625) prostheses. CE and SJ patients were well matched, except that CE patients had an earlier operation date and older age (63 ± 13 vs 59 ± 17 yrs). Survival at 5/10/13 years was similar in each group (69 ± 2/48 ± 2/35 ± 3% for CE and 72 ± 2/52 ± 4/44 ± 5% for SJ, p = 0.2). Multivariable independent predictors of survival were age, renal or lung disease, ejection fraction, mitral valve disease, coronary disease, and previous median sternotomy. CE versus SJ prosthesis did not